

Chapter 6

6.1 Find the unit rate.

1. $\frac{\$13.92}{8 \text{ gallons}}$

2. $\frac{58 \text{ mi}}{4 \text{ h}}$

3. $\frac{15 \text{ L}}{5 \text{ days}}$

4. $\frac{\$87.50}{5 \text{ tickets}}$

6.1 Write the equivalent rate.

5. $\frac{50 \text{ mi}}{1 \text{ h}} = \frac{? \text{ ft}}{1 \text{ h}}$

6. $\frac{\$58}{1 \text{ day}} = \frac{? \text{ dollars}}{1 \text{ week}}$

7. $\frac{440 \text{ ft}}{1 \text{ min}} = \frac{? \text{ ft}}{1 \text{ h}}$

8. $\frac{70 \text{ m}}{30 \text{ sec}} = \frac{? \text{ m}}{1 \text{ min}}$

Solve the proportion.

6.2 9. $\frac{4}{5} = \frac{x}{20}$

10. $\frac{5}{12} = \frac{a}{84}$

11. $\frac{z}{15} = \frac{12}{45}$

12. $\frac{c}{8} = \frac{28}{32}$

13. $\frac{8}{13} = \frac{w}{52}$

14. $\frac{3}{7} = \frac{d}{42}$

15. $\frac{b}{6} = \frac{75}{90}$

16. $\frac{n}{9} = \frac{56}{72}$

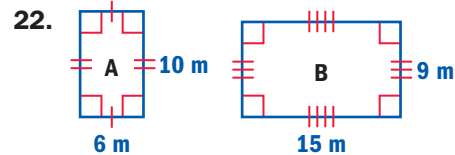
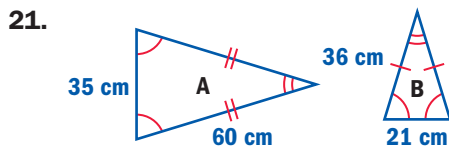
6.3 17. $\frac{12}{18} = \frac{2}{p}$

18. $\frac{24}{y} = \frac{21}{35}$

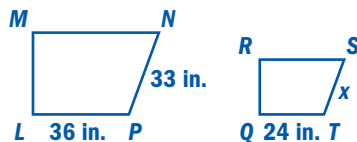
19. $\frac{36}{g} = \frac{27}{63}$

20. $\frac{3.8}{95} = \frac{5.7}{s}$

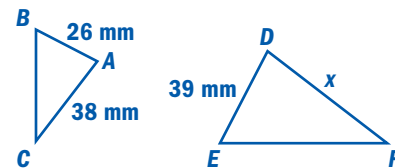
6.4 In Exercises 21 and 22, the figures are similar. Find the ratio of the lengths of corresponding sides of figure A to figure B.



6.5 23. Given $LMNP \sim QRST$, find ST .



24. Given $\triangle ABC \sim \triangle DEF$, find DF .



6.6 A map has a scale of 1 inch : 25 miles. Use the given map distance to find the actual distance.

25. 2 inches

26. 5 inches

27. 0.5 inch

28. 6.5 inches

6.7 In Exercises 29–32, suppose you roll a number cube. Find the probability of the event.

29. A multiple of 3

30. A multiple of 4

31. A factor of 6

32. An even number

6.8 33. You are working on a page for the yearbook and can choose one of 5 action photos, one of 3 group photos, and one of 6 individual photos. How many different groups of 3 photos can you choose?